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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,550	08/05/2003	Yuuki Tauchi	241154US0	6442
22850	7590	05/01/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			MORILLO, JANELLE COMBS	
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ALEXANDRIA, VA 22314			PAPER NUMBER	

1742

DATE MAILED: 05/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/633,550	<b>Applicant(s)</b> TAUCHI ET AL.	
	<b>Examiner</b> Janelle Combs-Morillo	<b>Art Unit</b> 1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 August 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 36-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 36-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) <u>12/22/04</u><br>Paper No(s)/Mail Date <u>8/5/03 3/9/04 5/3/04 6/9/05</u><br><u>1/31/05, 7/13/05, 9/21/05, 2/15/06, 4/17/06</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of group II without traverse is acknowledged. Group II is now considered to include newly added claims 36-41.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 36-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Nee'696 (US 7,018,696 B2).

Nee'696 teaches an optical recording medium with a substrate layer and a first reflective layer on the substrate of a silver alloy with added 0.01-5% bismuth (cl 23, abstract). Said first reflective layer can be a highly reflective layer (cl. 25) or a semi-reflective layer (cl. 26, 27). When the first layer is a semi-reflective layer, a second high reflective layer of said Ag-Bi alloy is also applied to form the storage medium (cl. 26, 27). Because Nee'696 teaches an optical storage medium substantially as presently claimed, it is held that Nee'696 anticipates the instant invention.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over CN 1248044 A (CN'044).

CN'044 teaches an optical recording medium, said medium with a highly reflective silver alloy layer adhered to the substrate material. Said silver alloy contains 50-95wt% silver as well as an alloying addition of Bi (abstract). Because the alloy composition of the instant reflective layer taught by CN'044 overlaps the instant composition (36-38), it is held that CN'044 has created a prima facie case of obviousness of the presently claimed invention.

Overlapping ranges have been held to be a prima facie case of obviousness, see MPEP § 2144.05. It would have been obvious to one of ordinary skill in the art to select any portion of the range, including the claimed range, from the broader range disclosed in the prior art, because the prior art finds that said composition in the entire disclosed range has a suitable utility.

Concerning claim 39, CN'044 teaches said silver alloy layer is highly reflective (abstract).

6. Claims 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP2000-057627A (JP'627).

JP'627 teaches an optical recording medium, said medium with a highly reflective silver alloy layer adhered to the substrate material (see translation at [0013]). Said silver alloy contains

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1-49% of an alloying addition, which can be Bi (abstract), which broadly overlaps the presently claimed alloying ranges. Example 4 of JP'627 teaches 15at% Bi (which falls outside the instant range). Because the alloy composition of the instant reflective layer taught by JP'627 broadly overlaps the instant composition (36-38), it is held that JP'627 has created a prima facie case of obviousness of the presently claimed invention.

Overlapping ranges have been held to be a prima facie case of obviousness, see MPEP § 2144.05. It would have been obvious to one of ordinary skill in the art to select any portion of the range, including the claimed range, from the broader range disclosed in the prior art, because the prior art finds that said composition in the entire disclosed range has a suitable utility.

Concerning claim 39, JP'627 teaches said silver alloy layer exhibits a highly reflectivity of  $\geq 70\%$  (see translation [0007]).

7. Claims 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP2001-184725A (JP'725).

JP'725 teaches an optical recording medium, said medium with a reflective silver alloy layer adhered to the substrate material (see translation at [0004]). Said silver alloy contains 0.5-5% of an alloying addition, which can be Bi (abstract), which broadly overlaps the presently claimed alloying ranges. Because the alloy composition of the instant reflective layer taught by JP'725 broadly overlaps the instant composition (36-38), it is held that JP'725 has created a prima facie case of obviousness of the presently claimed invention.

Overlapping ranges have been held to be a prima facie case of obviousness, see MPEP § 2144.05. It would have been obvious to one of ordinary skill in the art to select any portion of the

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range, including the claimed range, from the broader range disclosed in the prior art, because the prior art finds that said composition in the entire disclosed range has a suitable utility.

8. Claims 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over CN'044, JP'627, or JP'725 in view of Nee'603 (US 2002/0034603A1) or Worthington (US 2005/0018583A1).

CN'044, JP'627, and JP'725 are discussed in paragraphs above.

CN'044, JP'627, and JP'725 do not teach the first reflective Ag-Bi layer is a semi-transmissive film with a second layer on said substrate of a reflective Ag-Bi alloy.

However, Nee'603 teaches that similar silver alloys can be used as reflective and semi-reflective layers (see [0054]), and an optical recording medium structure with a partially reflective thin film layer as a first layer directly on the substrate (see Fig. 4, [0046]), as well as a second highly reflective film/coating. Nee'603 teaches that silver alloys can be provided with moderate to high reflectivity, and have good corrosion resistance (abstract). It would have been obvious to one of ordinary skill in the art to use the silver alloy taught by CN'044, JP'627, or JP'725 as a reflective and semi-reflective layers in a optical information recording medium structure taught by Nee'603 because Nee'603 teaches that silver alloys can be provided with moderate to high reflectivity, have good corrosion resistance, and are well suited for highly reflective and semi-reflective layers of optical disks (abstract).

Alternatively, Worthington teaches that optical disks may include a structure with a semi-reflective/partly transmissive layer of suitable silver or silver alloy, and the surface may be coated with another reflective layer. The reflectivity is selected in order to obviate readjustment

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of gain control when the disc reader switches it's reading between layers [0079]. It would have been obvious to one of ordinary skill in the art to use the silver alloy taught by CN'044, JP'627, or JP'725 as a reflective and semi-reflective layers in a optical information recording medium structure taught by Worthington, because Worthington teaches an operational recording medium structure with said layers is beneficial to obviate readjustment of gain control when the disc reader switches it's reading between layers [0079].

### ***Double Patenting***

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

### ***Copending Application No. 11/158079***

10. Claims 36-39 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5 of copending Application No. 11/158079 (US'079). Although the conflicting claims are not identical, they are not patentably distinct from

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each other because the claims of US'079 are also drawn to a Ag alloy reflective film of an optical recording medium, said Ag alloy comprising 0.01-3at% Bi (see cl. 1, 2).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

11. Claims 40-41 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5 of copending Application No. 11/158079 (US'079) in view of Nee'603.

It would have been obvious to one of ordinary skill in the art to use the silver alloy taught by the claims of US'079 as a reflective and semi-reflective layers in a optical information recording medium structure taught by Nee'603 because Nee'603 teaches that silver alloys can be provided with moderate to high reflectivity, have good corrosion resistance, and are well suited for highly reflective and semi-reflective layers of optical disks (abstract).

This is a provisional obviousness-type double patenting rejection.

*Copending Application No. 11/168497*

12. Claims 36-41 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-7 of copending Application No. 11/168497 (US'497). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of US'497 are also drawn to a Ag alloy reflective or semi-reflective film of an optical recording medium, said Ag alloy comprising 0.02-8at% Bi (see cl. 1, 9).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.



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*Copending Application No. 11/103615*

13. Claims 36-41 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 of copending Application No. 11/103615 (US'615). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of US'615 are also drawn to a Ag alloy reflective or semi-reflective film of an optical recording medium, said Ag alloy comprising 0.05-4.5at% Bi (see cl. 1, 9).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.


***Conclusion***


14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle Combs-Morillo whose telephone number is (571) 272-1240. The examiner can normally be reached on 8:30 am- 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
GEORGE WYSZOMIERSKI  
PRIMARY EXAMINER  
GROUP 1742

JCM   
April 25, 2006